

UNITED STATES DEPARTMENT OF COMMERCE Patent and Trademark Office

Address: COMMISSIONER OF PATENTS AND TRADEMARKS

Washington, D.C. 20231

APPLICATION NO. **FILING DATE** FIRST NAMED INVENTOR ATTORNEY DOCKET NO 09/364,072 07/30/99 SONG G 0630-0961P **EXAMINER** □ 002292 TM11/1024 BIRCH STEWART KOLASCH & BIRCH DAVIS, D P 0 BOX 747 **ART UNIT** PAPER NUMBER FALLS CHURCH VA 22040-0747 2652 **DATE MAILED:** 10/24/00

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

	Application	No.	Applicant(s)	
Office Action Summary	09/364,072		SONG, GEUN HYUK	
	Examiner		Art Unit	
	David D. Dav	is	2652	
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply				
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.				
 Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filled after SIX (6) MOSTHS from the mailing date of this communication. If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. If NO period for a proper specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). 				
1) Responsive to communication(s) filed on	·	,		
2a) This action is FINAL. 2b) ☑ Thi	s action is no	n-final.		
3) Since this application is in condition for allowance except for formal matters, prosecution as to the ments is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.				
Disposition of Claims				
4) Claim(s) 1-23 is/are pending in the application.				
4a) Of the above claim(s) is/are withdrawn from consideration.				
5) Claim(s) is/are allowed.				
6)⊠ Claim(い) 10,12,13,15,16 and 18-23 is/are rejected.				
7)⊠ Claim(ɛ) <u>6-9,11,14 and 17</u> is/are objected to.				
8) Claims are subject to restriction and/or election requirement.				
Application Papers				
9) The specification is objected to by the Examine	er.			
10) The dr. A 10 (s) filed on is/are objected to by the Examiner.				
11) The proposed drawing correction filed on is: a) approved b) disapproved.				
12) The oath or declaration is objected to by the Examiner.				
12) The can we declaration to objection to by the D				
Priority under 35 U.S.C. § 119				
13)⊠ Acknowles.cment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).				
a)☑ All b); Some * c)☐ None of the CERTIFIED copies of the priority documents have been:				
1.⊠ rec ∞ ed.				
2. received in Application No. (Series Code / Serial Number)				
3. Trace and in this National Stage application from the International Bureau (PCT Rule 17.2(a)).				
* See the that ed detailed Office action for a list of the certified copies not received.				
14) Acknows a germent is made of a claim for domestic priority under 35 U.S.C. & 119(e).				
Attachment(s)				
15) Notice of References Cited (PTO-892) 16) Notice of Draway reson's Patent Drawing Review (PTO-948) 17) Information Disclande Statement(s) (PTO-1449) Paper No(s) 3	18 19 1. 20	Notice of Informal	y (PTO-413) Paper I Patent Application (F	

Application/Control Number: 09/364,072

Art Unit: 2652

Priority

- 1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.
- 2. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 4. Claims 1-5, 10 and 12-13 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Araki et al (JP 62-24052).

Claim Rejections - 35 USC § 103

- 5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 6. Claims 15, 16 and 19-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Araki (JP 62-24052). With respect to claims 1-4, Araki discloses the

Application/Control Number: 09/364,072

Art Unit: 2652

claimed invention. However, as per claims 15 and 16, Araki is silent as to a metallic portion in the racing space and as per claims 19-20 Araki is silent as to a friction rough surface in the racing space.

Official notice is taken of the fact that metallic and friction rough surfaces are notoriously old and well known in the disc drive art.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to provide known surfaces, such as metallic and friction rough, in the racing space of Araki a having a plurality of balls for balancing. The rationale is as follows: one of ordinary skill in the art at the time the invention was made would have been motivated to provide known surfaces, such as metallic and friction rough, in a racing space so as to optimize the balancing of turntable by modifying movement/rotation of the balls with the known surface.

Allowable Subject Matter

- 7. Claims 6-9, 11, 14 and 17 are allowable over the prior art of record.
- 8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to David D. Davis whose telephone number is (703) 308-1503. The examiner can normally be reached on Mon., Tues., Thurs. and Fri. between 7:30-6:00.

Application/Control Number: 09/364,072

Art Unit: 2652

The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-9051 for regular communications and (703) 308-9052 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

″Bavid D. Davis Primary Examiner Art Unit 2652

ddd October 23, 2000